

What is claimed is:

1. A video imaging system, comprising:
  - a camera head for transmitting image data;
  - a camera control unit for receiving and processing said image data from said camera head;
  - 5 a storage device accessible by said camera control unit;
  - said storage device containing a program;
  - said program executing on said camera control unit for modifying hardware of said camera control unit to process said image data.
2. The video imaging system according to claim 1, wherein said camera control unit comprises at least one reconfigurable hardware device, from the group consisting of field programmable gate arrays, and computer programmable logic devices.
3. The video imaging system according to claim 2, wherein said program configures said reconfigurable hardware device of said camera control unit to enable it to process said image data from said camera head.
4. The video imaging system according to claim 1, wherein said camera control unit comprises at least one programmable hardware device, from the group consisting of digital signal processors, and microprocessors.
5. The video imaging system according to claim 4, wherein said programmable hardware device executes said program to enable said camera control unit to process said image data from said camera head.
6. The video imaging system according to claim 1, wherein said camera control unit comprises: at least one reconfigurable hardware device, from the group consisting of field programmable gate arrays,

and computer programmable logic devices; and at least one programmable hardware device, from the group consisting of digital signal processors, and microprocessors.

7. The video imaging system according to claim 6, wherein said program configures said reconfigurable hardware device of said camera control unit to enable it to process said image data from said camera head; and wherein said programmable hardware device executes said program to enable said camera control unit to process said image data from said camera head.

8. The video imaging system according to claim 1, wherein said storage device is located within said camera head.

9. The video imaging system according to claim 1, wherein said storage device is located within said camera control unit.

10. The video imaging system according to claim 1, wherein said storage device includes a removable, replaceable memory unit.

11. The video imaging system according to claim 1, wherein said storage device is remotely accessible.

12. The video imaging system according to claim 11, wherein said storage device is an Intranet location.

13. The video imaging system according to claim 11, wherein said storage device is an Internet location.

14. The video imaging system according to claim 1, wherein said program enables said camera control unit to issue commands to said camera head.

15. The video imaging system according to claim 14, wherein said camera head sends confirmation to said camera control unit that said commands were received, and said commands have been, or will be, executed.

16. The video imaging system according to claim 14, wherein said camera head adjusts operating characteristics in response to said camera control unit commands.

17. A video imaging system, comprising:  
a camera for transmitting image data;  
a camera control unit for receiving and processing the image data from said camera;  
5 a storage device accessible by said camera control unit;  
software executing on said camera control unit for receiving a program stored on said storage device; and  
said program executing on said camera control unit for modifying hardware of said camera control unit for receiving the image data.  
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18. The system according to claim 17, further comprising software executing on said camera control unit for determining when said camera is in communication with said camera control unit.

19. The system according to claim 17, further comprising software executing on said camera control unit for downloading said program when said camera is in communication with said camera control unit.

20 The system according to claim 17, wherein the storage device is a remote location.

21. The system according to claim 20, wherein said remote location is an Internet location.

22. A video imaging system, comprising:  
a camera for transmitting image data;  
a camera control unit for receiving and processing the image  
data from said camera;  
5 a storage device accessible by said camera control unit;  
software executing on said camera control unit for determining  
when said camera is in communication with said camera control unit;  
software executing on said camera control unit for receiving a  
program stored on said storage device when said camera is in  
10 communication with said camera control unit;  
said program executing on said camera control unit for  
modifying hardware of said camera control unit; and  
said program executing on said camera control unit for enabling  
said camera control unit to process the image data.

23. The video imaging system according to claim 22, wherein the  
configurable portion further comprises a field programmable gate array.

24. The video imaging system according to claim 23, wherein said  
program configures said field programmable gate array of said camera  
control unit to enable it to process image data from said camera.

25. The video imaging system according to claim 22, wherein said  
program enables said camera control unit to issue commands to said  
camera and camera sends confirmation to said camera control unit that  
said commands were received.

26. The video imaging system according to claim 22, further  
including a second storage device and processed image data is stored  
on said second storage device.

27. A video imaging system, comprising:  
a camera control unit for receiving and processing image data;

a program for enabling said camera control unit to process the image data;

5           a configurable hardware device located on said camera control unit for processing the image data;

              a processor located on said camera control unit for executing said program; and

10           said program executing on said processor for modifying said configurable hardware device and enabling said camera control unit to process the image data.

28. The video imaging system according to claim 27, further comprising a pre-existing program located on said configurable hardware device for processing the image data.

29. The video imaging system according to claim 28, wherein said program executing on said processor overwrites said pre-existing program.

30. The video imaging system according to claim 27, wherein said configurable hardware device further comprises a non-overwritable portion for requesting said program.

31. The video imaging system according to claim 30, wherein said non-overwritable portion loads said program.

32. A method for video imaging, comprising the steps of:  
providing a camera for transmitting image data;

              providing a camera control unit for processing the transmitted image data;

5           determining when the camera is in communication with the camera control unit;

              retrieving a program for enabling the camera control unit to be compatible with the camera;

              executing the program on the camera control unit; and

10 modifying a hardware device of the camera control unit to  
enable the camera control unit to process image data transmitted from  
the camera.